

## THAMES RIVER BASIN

## 01121000 MOUNT HOPE RIVER NEAR WARRENVILLE, CT

**LOCATION**--Lat 41°50'37", long 72°10'10", Windham County, Hydrologic Unit 01100002, on left bank 250 ft downstream from Knowlton Brook, 700 ft upstream from bridge on State Route 89, 1.8 mi south of Warrenville, and 3.2 mi southwest of Ashford.

**DRAINAGE AREA**--28.6 mi<sup>2</sup>.

**PERIOD OF RECORD**--July 1940 to current year.

**REVISED RECORDS**--WSP 1331: 1941, 1951-53(M). WSP 1721: Drainage area. WDR CT-75-1: 1974 (P).

**GAGE**--Water-stage recorder. Datum of gage is 335.68 ft above sea level. Satellite telemetry at station.

**REMARKS**--Records good except those for periods with ice effect, which are fair. Chemical analyses available for water year 1959 (WSP 1641). Occasional regulation from ponds upstream.

**EXTREMES OUTSIDE PERIOD OF RECORD**--Flood of September 1938 reached a stage of about 14.5 ft, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	14	25	e14	74	454	63	22	13	4.4	1.6	.78
2	14	13	24	e14	231	201	60	21	12	6.1	1.4	.72
3	9.7	12	21	200	533	130	55	20	11	8.1	1.2	.69
4	8.8	12	20	230	202	614	54	22	9.5	12	1.1	.62
5	8.6	11	19	e80	172	248	51	51	8.4	9.5	1.2	.68
6	8.6	11	19	e55	116	153	44	39	7.4	5.3	1.4	.95
7	9.4	10	21	e35	97	140	42	31	7.0	4.7	1.1	1.1
8	51	10	21	e28	87	e105	40	34	6.3	3.4	1.3	1.5
9	154	10	29	163	77	e95	39	41	5.7	2.6	1.5	1.5
10	102	10	24	174	72	e85	39	29	5.8	2.6	1.4	7.6
11	85	35	21	e60	66	e79	36	25	5.3	2.0	1.5	11
12	51	40	20	e40	65	e76	54	20	4.9	1.8	1.8	4.2
13	36	28	19	e32	98	e73	41	18	4.9	1.7	1.8	2.4
14	48	23	18	e28	71	e71	36	16	5.1	1.6	3.1	2.8
15	74	22	19	278	56	86	32	15	5.1	1.5	4.7	4.1
16	44	22	19	342	54	82	31	14	4.2	1.4	3.5	145
17	32	23	20	149	52	99	46	13	4.0	1.2	2.5	194
18	27	26	26	214	133	115	39	13	4.2	1.1	2.0	43
19	27	22	21	449	145	94	33	30	3.9	1.3	1.5	18
20	23	21	20	166	89	74	33	93	3.5	1.6	1.3	11
21	21	26	20	108	71	66	31	44	3.2	1.5	1.7	8.7
22	19	28	25	111	56	427	33	27	3.2	1.2	1.7	9.8
23	14	21	e22	108	e52	236	49	24	2.9	1.3	1.7	8.9
24	12	20	21	383	e49	140	50	84	2.7	2.6	1.5	6.9
25	14	18	e19	334	e47	119	36	109	2.5	3.7	1.2	6.0
26	13	29	e18	156	e46	95	31	55	2.4	10	1.3	5.3
27	12	55	e17	e100	e45	83	28	37	2.2	7.0	1.8	4.6
28	12	36	e16	e80	91	118	27	29	2.1	3.3	1.7	4.5
29	20	28	e16	e70	---	107	25	23	1.9	2.3	1.9	4.4
30	19	25	e15	e64	---	82	24	18	1.9	1.7	1.1	17
31	15	---	e15	e60	---	68	---	15	---	1.7	.91	---
TOTAL	1009.1	661	630	4325	2947	4615	1202	1032	156.2	110.2	53.41	527.74
MEAN	32.6	22.0	20.3	140	105	149	40.1	33.3	5.21	3.55	1.72	17.6
MAX	154	55	29	449	533	614	63	109	13	12	4.7	194
MIN	8.6	10	15	14	45	66	24	13	1.9	1.1	.91	.62
CFSM	1.14	.77	.71	4.88	3.68	5.21	1.40	1.16	.18	.12	.06	.62
IN.	1.31	.86	.82	5.63	3.83	6.00	1.56	1.34	.20	.14	.07	.69

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1999, BY WATER YEAR (WY)

MEAN	26.8	48.0	63.2	71.4	73.5	109	93.4	60.3	36.2	15.2	16.1	16.0
MAX	144	131	200	264	203	219	197	119	207	60.4	148	118
(WY)	1956	1956	1997	1979	1970	1972	1983	1984	1982	1972	1955	1954
MIN	3.44	7.64	14.4	12.0	16.2	47.4	29.7	19.0	4.99	1.35	.79	1.05
(WY)	1958	1950	1944	1981	1980	1981	1985	1957	1957	1957	1957	1953

e Estimated.

**THAMES RIVER BASIN**  
**01121000 MOUNT HOPE RIVER NEAR WARRENVILLE, CT—Continued**

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1941 - 1999
ANNUAL TOTAL	23988.2	17268.65	
ANNUAL MEAN	65.7	47.3	52.3
HIGHEST ANNUAL MEAN			75.0
LOWEST ANNUAL MEAN			26.0
HIGHEST DAILY MEAN	1070 Mar 9	614 Mar 4	2640 Aug 19 1955
LOWEST DAILY MEAN	3.2 Sep 14	.62 Sep 4	.20 Aug 21 1957
ANNUAL SEVEN-DAY MINIMUM	4.1 Sep 9	.76 Aug 31	.40 Aug 8 1957
INSTANTANEOUS PEAK FLOW		976 Feb 2	<b>a</b> 5590 Aug 19 1955
INSTANTANEOUS PEAK STAGE		6.61 Feb 2	<b>b</b> 10.41 Aug 19 1955
INSTANTANEOUS LOW FLOW		.55 Sep 4	.15 Aug 25 1957
ANNUAL RUNOFF (CFSM)	2.30	1.65	1.83
ANNUAL RUNOFF (INCHES)	31.20	22.46	24.83
10 PERCENT EXCEEDS	140	113	114
50 PERCENT EXCEEDS	36	21	31
90 PERCENT EXCEEDS	6.7	1.6	4.1

a From rating curve extended above 890 ft<sup>3</sup>/s on basis of contracted opening of peak flow.  
 b From floodmarks in gage well.

